

**STATE FOREST LAND  
ENVIRONMENTAL CHECKLIST**

**Purpose of Checklist:**

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

**Instructions for Applicants:**

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. Highlighted questions are supplemental to the standard SEPA checklist. These questions look at the proposed project in relationship to the surrounding landscape. Adjacency and landscape/watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at <http://www.dnr.wa.gov> under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the attached forest practice application acres, or the actual timber sale acres.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

**Use of checklist for nonproject proposals:**

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

**A. BACKGROUND**

1. Name of proposed project, if applicable:  

Timber Sale Name: POLSON RAILROADAgreement #: 030-074817
2. Name of applicant: Washington State Department of Natural Resources
3. Address and phone number of applicant and contact person:  

Olympic Region  
411 Tillicum Lane  
Forks, WA 98331

Contact Person: Jenny Garstang  
Telephone: (360) 374-6131
4. Date checklist prepared: 12/17/2002
5. Agency requesting checklist: Washington State Department of Natural Resources
6. Proposed timing or schedule (including phasing, if applicable):  

a. Auction Date: 10/30/2003  
b. Planned contract end date (but may be extended): 10/30/2004  
c. Phasing:
7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

**Timber Sale**

- a. Site preparation:Landings and slash piles will be burned upon completion of harvest.
- b. Regeneration Method:Hand planting of western hemlock and Douglas-fir will be completed within the first planting season after harvest, with a total of 300 trees per acre.
- c. Vegetation Management:Hand slash alder and brush if needed at approximate age 5-7.
- d. Thinning:Assess need for pre-commercial thin at age 15 and commercial thin at age 30.

**Roads:** The Polson Camp and Lonesome Polson roads will likely be used again for future timber haul.

**Rock Pits and/or Sale:** No.

**Other:** No.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

☒303 (d) – listed water body in WAU: ☒temp ☐sediment ☐completed TMDL (total maximum daily load): Humptulips River

☐Landscape plan:

☐Watershed analysis:

☐Interdisciplinary team (ID Team) report:

☒Road design plan: Available at Olympic Region office.

☐Wildlife report:

☐Geotechnical report:

☐Other specialist report(s):

☐Memorandum of understanding (sportsmen’s groups, neighborhood associations, tribes, etc.):

☐Rock pit plan:

☒Other: Final Forest Resource Plan (July 1992); Final Habitat Conservation Plan (September 1997); State Soil Survey; South Coast Marbled Murrelet Habitat Model; Forestry Handbook (August 1999)

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.  
No.

10. List any government approvals or permits that will be needed for your proposal, if known.

☐HPA ☒Burning permit ☐Shoreline permit ☒Incidental take permit ☒FPA # ☒Other: Board of Natural Resources

11. Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)

a. Complete proposal description:

A proposed area of approximately 43 acres of second-growth conifer timber, located in section 36, Township 20N, Range 10W was considered for regeneration harvest. Field reconnaissance revealed a type 3 stream system with associated wetlands and a type 5 stream. The type 3 stream and associated wetlands are buffered out of the sale in accordance with the Department of Natural Resources (DNR) Habitat Conservation Plan (HCP) and the resulting net harvestable area is 35.7 acres. The type 5 stream will be protected with yarding restrictions. The streams associated with this sale are tributary to Big Creek, which flows into the Humptulips River. There is an estimated 958 MBF of timber to be harvested which consists of second-growth western hemlock with some scattered Douglas-fir, Sitka spruce, and western redcedar. There are 343 leave trees arranged in clumps located throughout the sale. No new roads will be constructed for this sale and road maintenance will consist of grading 3,500’ of existing gravel logging road.

b. Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.

This area was clearcut around the 1940’s. It regenerated naturally into a stand of western hemlock, with a few Douglas-fir, Sitka spruce, and western redcedar, with approximately 200 trees per acre with an average DBH of 17 inches. These stands are variable, but generally are clean second growth with little in the way of large down wood, but with several small void areas. The current proposal is for a regeneration harvest of a portion of this section. The objective is to manage the area as forestland to produce revenue, provide wildlife habitat, maintain the hydrology, and maintain long-term soil productivity. The South Coast marbled murrelet model identified this stand as re-classified marbled murrelet habitat. It was surveyed for two years and is now classified as non-occupied.

c. Road activity summary. See also attached forest practice application (FPA) for maps and more details.

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		0	0	0
Reconstruction		0		0
Maintenance		3,500’		0
Abandonment		0	0	0
Bridge Install/Replace	0			0
Culvert Install/Replace (fish)	0			0
Culvert Install/Replace (no fish)	0			

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. (See attached timber sale map. See also color landscape/WAU map on the DNR website <http://www.dnr.wa.gov> under “SEPA Center.”)

a. Legal description:

T20N R10W S36

b. Distance and direction from nearest town (include road names):  
This sale is located 15 miles north of Hoquiam, Washington on US 101 and the Polson Camp county road.

c. Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website <http://www.dnr.wa.gov> under “ SEPA Center.”)

WAU Name	WAU Acres	Proposal Acres
HUMPTULIPS, MIDDLE	28431	36

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website <http://www.dnr.wa.gov> under “SEPA Center” for a broader landscape perspective.)

This proposal is located in the Middle Humptulips WAU on the east side of Big Creek. There are 28,431 acres in this WAU, of which DNR manages 983 acres, or about 3% of the WAU. Grays Harbor County manages 7%, and the rest, approximately 90% of the WAU, is presumably in private ownership. Forest stands within the WAU appear to be almost exclusively second and third growth stands.

On private land, a partial cut of approximately 25 acres occurred in 2001 5 miles west of this proposal and a regeneration harvest of perhaps 40 acres was completed in 1999 1 mile west of this proposal. There are several other current and expired Forest Practice permits on private and county land in the WAU, but the prescription and protection measures involved are unknown. The numbers of current and past Forest Practices shown on the attached WAU map, along with observations within the WAU, indicate that the privately owned timberlands are fairly heavily managed and the county lands have relatively low levels of harvest. While it is difficult to determine from available information, a quick analysis of Forest Practices maps and orthophotos for the WAU indicates that approximately 1,500 acres have been regeneration harvested in the last 7 years and that about 60 percent of the forest land in the WAU is hydrologically mature. Management includes regeneration harvest, thinning, and partial cuts. Future plans for harvest activity on private lands and other ownerships are unknown. This proposal will be the fifth timber sale on DNR land in this WAU in the last seven years. There are three partial sections of state land in this WAU. In section 16, T20N, R10W, there has been no recent harvest activity on state lands. In section 36, T20N, R11W, there have been two timber sales completed recently. A regeneration harvest of 73 acres was completed and replanted in 1998. The second sale was a regeneration harvest of 29 acres completed in 2000 and since replanted. Another regeneration harvest, the Walker Road #2 timber sale, is scheduled to sell in March 2003. In section 36, T20N, R10W, a regeneration harvest of 58 acres was completed in 1999 and has since been replanted. Additional stands within the WAU will be selected for regeneration, thinning, and partial cut harvests in the future as they meet the departments' financial and ecological policies and mandates.

The DNR has an HCP agreement with the federal government concerning threatened and endangered species and their habitats, which requires the department to manage landscapes with the intent to preserve and enhance habitat used by fish and older forest dependent species. This agreement substantially helps the department to mitigate for any potential harmful cumulative effects related to its management activities. The HCP is designed to protect and promote fish and wildlife species and their habitats over a broad regional area. The applicable HCP strategies incorporated into this proposal are as follows:

- Retaining Riparian Management Zones (RMZ's) on type 3 streams and associated wetlands,
- Retaining a minimum of 8 leave trees per acre scattered and clumped throughout the unit,
- Complying with the interim marbled murrelet strategy,
- Analyzing, designing, constructing, and maintaining a road system to minimize potential adverse effects on the environment.

Several measures have been taken to ensure that this proposal will not contribute to adverse environmental impacts through cumulative effects. Approximately 7 acres of the original proposal were tagged out of the sale for riparian management zones to protect the type 3 stream and associated wetlands. These RMZ's are 156' wide, equivalent to the 100 year site index. There will be no harvest activities within these buffers. RMZ's protect water quality, stream bank integrity, hydrology, sensitive soils, and habitat for riparian species. They also provide large woody debris (LWD) recruitment and habitat for riparian species. Furthermore, the RMZ's will develop old-forest characteristics that, in combination with other strategies, will help support old-forest dependant wildlife populations in the future. The South Coast marbled murrelet model identified this stand as re-classified marbled murrelet habitat. The area has now been surveyed for two years and no occupancy has been detected.

Retaining 9.6 leave trees per acre in the regeneration harvest area provides legacy elements for recruitment of future snags, coarse woody debris, multi-layered stands, and large diameter trees. In combination these features will provide elements of old forest habitat characteristics within the next rotation. By managing to develop climax forest characteristics, habitats will be provided for wildlife species dependent on old forest habitat.

Existing roads will be maintained to divert storm water onto stable forest floor to prevent delivery of sediment to live streams. To protect soil productivity and reduce erosion, ground based operations will be suspended during periods of wet weather or wet soil conditions when rutting of skid or shovel roads begins. Following harvest, the site will be replanted with western hemlock and Douglas fir and managed as forestland. These measures will minimize harvest and road impacts on the environment.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

☒Flat, ☐Rolling, ☐Hilly, ☐Steep Slopes, ☐Mountainous, ☐Other:

1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone). The WAU consists of low elevation, fairly flat ground centered on Axford Prairie with steeper, hilly ground to the northeast and the south. The Middle Fork Humptulips River runs through the eastern part of the WAU. 100% of the WAU is in the lowland zone. Precipitation ranges from 100 to 110 inches per year. Elevations range from 42' to 762' with the mean elevation being 219'. The major timber types are western hemlock, Douglas-fir, and red alder, and this proposal is located in the western hemlock zone.

2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s). This proposal is located on flat ground with an average elevation of 150'.

b. What is the steepest slope on the site (approximate percent slope)?  
10%.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.

State Soil Survey #	Soil Texture or Soil Complex Name	% Slope	Acres	Mass Wasting Potential	Erosion Potential
2988	SILT LOAM	8-30	19	INSIGNIFIC'T	MEDIUM
5262	SLT.CLY.LOAM	0-2	11	INSIGNIFIC'T	LOW
2986	SILT LOAM	1-8	6	INSIGNIFIC'T	LOW

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- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
- 1)

Surface indications:  
None known or observed. The landforms in the sale area are flat and the stream banks are stable.
- 2)

Is there evidence of natural slope failures in the sub-basin(s)?  
☐No ☒Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:  
There is evidence of natural slope failures occurring along the Humptulips River. The streambanks will sometimes erode during high water events.
- 3)

Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?  
☒No ☐Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:  
Associated management activity:  
None observed.
- 4)

Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?  
☒No ☐Yes, describe similarities between the conditions and activities on these sites:  
The terrain within the sale and along the stream banks is nearly flat.
- 5)

Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.  
None.

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
- Approx. acreage new roads: 0

Approx. acreage new landings: 0.2

Approx. acreage rock pit fills:

Fill source:
- There is no new road construction. Existing roads will be maintained.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
- Yes, minimal erosion may occur as the result of road use and logging operations.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? Approximate percent of proposal in permanent road running surface (includes gravel roads):
- None.

- h. Propose measures to reduce or control erosion, or other impacts to the earth, if any:  
(Include protection measures for minimizing compaction or rutting.)
- To reduce erosion roads will be maintained with properly located ditches, ditch outs and cross drains to divert water onto stable forest floor and/or into stable natural drainages. Ground based operations will be suspended during periods of wet weather or wet soil conditions when rutting of skid or shovel roads begins. Riparian management zones averaging 156 feet wide have been incorporated into the sale design to decrease the possibility of sediment delivery, loss of stream function, and maintain stream bank integrity. All timber is to be felled and yarded away from riparian management zones. Harvested areas will be reforested within 1 growing season of the expiration of the contract.

2. Air

- a. What types of emissions to the air would result from the proposal (i.e., dust from truck traffic, rock mining, crushing or hauling, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.
- Insignificant amounts of engine exhaust from logging equipment and dust from passage of log trucks. Logging slash, if burned, will be burned adhering to the State's smoke management plan.
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.
- No.
- c. Proposed measures to reduce or control emissions or other impacts to air, if any:
- Adherence to burn permit provisions and smoke management plan when burning slash piles.

3. Water

- a. Surface:
- 1)

Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. (See attached timber sale map and forest practice base maps.)  
Yes. A type 3 stream with associated wetlands and a type 5 stream flow along the north and west boundaries, then south approximately ¼ mile to Big Creek.
- a)

Downstream water bodies:  
Big Creek flows west approximately 7 miles to the Humptulips River.
- b)

Complete the following riparian & wetland management zone table:
- | Wetland, Stream, Lake, Pond, or Saltwater Name (if any) | Water Type | Number (how many?) | Avg RMZ/WMZ Width in Feet (per side for streams) |
|---|------------|--------------------|--|
| Stream  | 3          | 1                  | 156  |
| Associated wetlands                                     | 3          | 1                  | 156  |
| Stream  | 5          | 1                  | 0  |
|   |            |                    |  |
- c)

List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.

A type 3 stream with associated wetlands and a type 5 stream flow along the north and west boundaries of this sale. The type 3 stream and associated wetlands are protected with 156' wide RMZ's. The type 5 stream is protected by limiting yarding and tree felling activities. Wind buffers are not required per HCP procedure due to a combination of stream size, location, and local wind direction. All timber is to be felled and yarded away from all streams. The existing Polson Camp road crosses the type 3 stream. Roads will be maintained with properly located ditches, ditch outs and cross drains to divert water onto stable forest floor and/or into stable natural drainages.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.  
☐No ☒Yes (See RMZ/WMZ table above and attached timber sale map.)  
Description (include culverts):  
As described above, there will be timber harvest to within 156' of the type 3 streams and associated wetlands, and no equipment operating within 30' of the type 5 stream.
- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.  
None.
- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. (Include diversions for fish-passage culvert installation.)  
☒No ☐Yes, description:
- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.  
☒No ☐Yes, describe location:
- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.  
☒No ☐Yes, type and volume:
- 7) Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?  
Yes. Approximately 14% of the WAU has a high soil erosion potential and 1% has a high mass wasting potential. These areas are in the northeast and southern part of the WAU along the headwall areas of small tributary streams. They are not particularly steep but correspond to certain soil types. The potential for eroded material to enter surface water based on this proposal is low due to the low to medium erosion potential of the soils on the site and the control measures being included in the proposal (see B.1.h.).
- 8) Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?  
☐No ☒Yes, describe changes and possible causes:  
There is evidence of surface erosion and mass wasting along the stream banks of the Humptulips River. Elevated streambeds attributed to accelerated aggradations of sediment in the channels are the main indicator of channel changes in the WAU. There is also a general decrease in the amount of LWD in streams that were not buffered during past harvest activities which has contributed to a decrease in recruitment and the natural decay process removing existing LWD. Where the stream banks erode, as described above, the channels may change dimension and/or direction over time, but again this is associated with the Humptulips River and is not associated with the streams adjacent to this proposal.
- 9) Could this proposal affect water quality based on the answers to the questions 1-8 above?  
☐No ☒Yes, explain:  
The RMZ's and other items listed in B.1.h., B.3.a.1.c above and B.3.d. below will minimize sediment delivery to streams. These mitigation elements should limit any effects on water quality in relation to the items of concern revealed in questions 1-8.
- 10) What are the approximate road miles per square mile in the WAU and sub-basin(s)? There are 2.9 road miles per square mile in the WAU.  
Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?  
☐No ☒Yes, describe:  
Of the roads observed in the WAU only a small portion of the roads intercept sub-surface flow and deliver it to streams. In recent years an emphasis has been placed on using more cross-drain culverts both on new road construction and on existing road reconstruction. This has resulted in more ditch water being diverted back to the forest floor.
- 11) Is the proposal within a significant rain-on-snow (ROS) zone? If not, **STOP HERE** and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.  
☒No ☐Yes, approximate percent of WAU in significant ROS zone.  
Approximate percent of sub-basin(s):
- 12) If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?
- 13) Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?  
☐No ☒Yes, describe observations:  
As described above, some of the stream banks along the Humptulips River can erode during periods of high water. The mass wasting described in B.1.d.2. above occurs during peak flow events and can result in accelerated sediment aggradations. Lack of LWD can contribute to stream channelization during peak flow events.
- 14) Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.  
This proposal may slightly change the timing, duration, and amount of water in a peak flow event. Flow rates may increase slightly during low flow periods due to decreased transpiration and interception until the forest vegetation recovers. However, the unit size, location (not in the Rain-on-Snow Zone), Riparian Management Zones, and green-up policies will minimize this proposal's potential contribution to peak flows.

- 15) Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?  
☒No ☐Yes, possible impacts:
- 16) Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.  
 Recent increases in the number and spacing of culverts to divert water to the forest floor have been accomplished. Retaining large RMZ's on streams that maintain bank stability, provide LWD, and reduce impacts to hydrologic function. Maintaining unit sizes less than 100 acres and waiting for green-up before harvesting adjacent DNR stands. See B.1.h , B.3.a.1.c and A.13.

b. Ground Water:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.  
 No.
- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.  
 Does not apply.
- 3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?  
☒No ☐Yes, describe:
- a) Note protection measures, if any.  
 All stream and wetland areas are well protected with appropriate buffers and all ditch water will be directed to stable forest floor. See B.3.a.1.c and A.13.

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.  
 Storm water runoff will be collected by road ditches and diverted through cross drain culverts onto the forest floor. Culverts will be placed at a location to minimize the amount of water runoff directly entering existing stream channels.
- 2) Could waste materials enter ground or surface waters? If so, generally describe.  
 No.
- a) Note protection measures, if any.  
 Does not apply.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:  
 (See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)

#### 4. Plants

a. Check or circle types of vegetation found on the site:

- ☒deciduous tree: ☒alder, ☐maple, ☐aspen, ☐cottonwood, ☐western larch, ☐birch, ☐other:  
☒evergreen tree: ☒Douglas fir, ☐grand fir, ☐Pacific silver fir, ☐ponderosa pine, ☐lodgepole pine,  
☒western hemlock, ☐mountain hemlock, ☐Englemann spruce, ☒Sitka spruce,  
☒red cedar, ☐yellow cedar, ☐other:  
☒shrubs: ☒huckleberry, ☒salmonberry, ☒salal, ☐other:  
☐grass  
☐pasture  
☐crop or grain  
☒wet soil plants: ☐cattail, ☐buttercup, ☐bullrush, ☒skunk cabbage, ☒devil's club, ☐other:  
☐water plants: ☐water lily, ☐eelgrass, ☐milfoil, ☐other:  
☐other types of vegetation:  
☒plant communities of concern: Associated wetlands.

b. What kind and amount of vegetation will be removed or altered? (See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)

- 1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area.  
 (See landscape/WAU and adjacency maps on the DNR website at: <http://www.dnr.wa.gov> under "SEPA Center.")  
 The removal area is 60 year old second growth western hemlock and other minor species, with approximately 200 trees per acre with an average diameter at breast height of 17 inches. The stand to the north was logged in 1996 and has since been replanted. The private land to the east is a 12 year old Douglas-fir plantation with very little structural diversity. To the south is a young mixed species plantation on state land harvested around 1994. To the west, across the riparian management zone, is a 30 year old Douglas-fir and western hemlock stand with several larger residual trees scattered throughout.
- 2) Retention tree plan:  
 HCP requirements are to leave 7% of the stand with a DBH of 12" or greater, which in this case worked out to 9.6 trees per acre, or 343 leave trees total. Retention trees are clumped throughout the sale to provide a variety of upland habitat diversity. A few snags were left in the middle of clumps where safe to do so. Retention trees provide legacy elements in

this proposal for recruitment of future snags, coarse woody debris, and large diameter trees with old forest habitat characteristics. By managing to develop these climax forest characteristics, habitats will be provided in the future for wildlife species dependent on old forest habitat.

- c. List threatened or endangered plant species known to be on or near the site.

TSU Number	FMU ID	Common Name	Federal Listing Status	WA State Listing Status
None Found in Database Search				

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: Douglas-fir and western hemlock will be planted, and other native conifer species may regenerate naturally on the site after harvest. There are 9.6 leave trees per acre arranged in clumps throughout the sale. See A.7 (a.b.c.d.) and B.4.b.(2), above.

5. Animal

- a. Circle or check any birds animals or unique habitats which have been observed on or near the site or are known to be on or near the site:

birds: ☒hawk, ☐heron, ☐eagle, ☒songbirds, ☐pigeon, ☐other:  
mammals: ☒deer, ☒bear, ☒elk, ☐beaver, ☐other:  
fish: ☐bass, ☐salmon, ☒trout, ☐herring, ☐shellfish, ☐other:  
unique habitats: ☐talus slopes, ☐caves, ☐cliffs, ☐oak woodlands, ☐balds, ☐mineral springs

- b. List any threatened or endangered species known to be on or near the site (include federal- and state-listed species).

TSU Number	FMU ID	Common Name	Federal Listing Status	WA State Listing Status
None Found in Database Search				

- c. Is the site part of a migration route? If so, explain.  
☒Pacific flyway ☐Other migration route: Explain if any boxes checked:  
This proposal is located in the Pacific flyway, but is not known to be used as a resting or feeding area by migratory waterfowl. There was no open water observed in the associated wetlands.

- d. Proposed measures to preserve or enhance wildlife, if any:

- 1) Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.
- Species /Habitat: Riparian dependent species Protection Measures: 156’ wide RMZ’s
- Species /Habitat: Upland dependent species Protection Measures: 343 leave trees
- Species /Habitat: Marbled Murrelet Protection Measures: Surveyed for two years, no occupancy

By designing this sale to comply with the State’s HCP, wildlife and wildlife habitat will be preserved and enhanced. The small unit design is conducive to ungulate feeding patterns. Scattered leave tree clumps are favorable to raptor perching, feeding, and nesting. Proper road maintenance reduces potential water quality impacts for down stream fish populations. Bounding out streams and wetlands from the proposed harvest unit help to protect water quality and provides wildlife habitat. Large diameter leave trees will enhance wildlife habitat value of the future stand. Riparian Management Zones adjacent to streams and wetlands will protect water quality, provide corridors for wildlife, and maintain habitat for fish, reptiles, and other riparian species.

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project’s energy needs? Describe whether it will be used for heating, manufacturing, etc.  
Does not apply.
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.  
No.
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:  
Does not apply.

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.  
Minimal hazard incidental to operating heavy machinery.
- 1) Describe special emergency services that might be required.  
Fire suppression, hazardous waste cleanup.
- 2) Proposed measures to reduce or control environmental health hazards, if any:  
The timber sale contract requires purchaser to minimize risk of fire and does not allow for disposal of any kind of waste on any State lands.
- b. Noise
- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?  
None.
- 2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.  
Noise from heavy equipment and log truck traffic during daylight hours while the sale is active.

- 3) Proposed measures to reduce or control noise impacts, if any:  
None.

**8. Land and Shoreline Use**

- a. What is the current use of the site and adjacent properties? (Site includes the complete proposal, e.g. rock pits and access roads.)  
Timber production.
- b. Has the site been used for agriculture? If so, describe.  
No.
- c. Describe any structures on the site.  
None.
- d. Will any structures be demolished? If so, what?  
No.
- e. What is the current zoning classification of the site?  
Grays Harbor County Timber Production
- f. What is the current comprehensive plan designation of the site?  
Grays Harbor County Timber Production
- g. If applicable, what is the current shoreline master program designation of the site?  
Does not apply.
- h. Has any part of the site been classified as an “environmentally sensitive” area? If so, specify.  
No.
- i. Approximately how many people would reside or work in the completed project?  
Does not apply.
- j. Approximately how many people would the completed project displace?  
Does not apply.
- k. Proposed measures to avoid or reduce displacement impacts, if any:  
None.
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:  
This proposal is consistent with the current land use designation and in compliance with the HCP, Forest Resources Plan, Forest Practice rules, and the SEPA process.

**9. Housing**

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.  
Does not apply.
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.  
Does not apply.
- c. Proposed measures to reduce or control housing impacts, if any:  
None.

**10. Aesthetics**

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed?  
Does not apply.
- b. What views in the immediate vicinity would be altered or obstructed?  
Majority of the sale area will be temporarily void of timber until regeneration is established.
- 1) Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?  
☒ No ☐ Yes, viewing location:
- 2) Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?  
☒ No ☐ Yes, scenic corridor name:
- 3) How will this proposal affect any views described in 1) or 2) above?  
Does not apply.
- c. Proposed measures to reduce or control aesthetic impacts, if any:  
Leave trees are clumped throughout the sale area and the site will be replanted within the first planting season after harvest with 300 trees per acre of western hemlock and Douglas-fir. See A.7 (b.c.d.) and B.4.b.(2).

**11. Light and Glare**

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?  
None.
- b. Could light or glare from the finished project be a safety hazard or interfere with views?  
Does not apply.



- c. What existing off-site sources of light or glare may affect your proposal?  
Does not apply.
- d. Proposed measures to reduce or control light and glare impacts, if any:  
None.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?  
Dispersed informal recreation in the form of hunting, berry picking, sightseeing, etc.
- b. Would the proposed project displace any existing recreational uses? If so, describe:  
Informal recreation will be temporarily displaced during logging operations on the timber harvest area.
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:  
None.

13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.  
None have been identified.
- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.  
None are known to be on or near the site.
- c. Proposed measures to reduce or control impacts, if any:  
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)  
None.

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.  
Sale is accessed by existing gravel logging roads from the Polson Camp county road.
  - 1) Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?  
No.
- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?  
No.
- c. How many parking spaces would the completed project have? How many would the project eliminate?  
Does not apply.
- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).  
No. Sale will use existing gravel logging roads requiring only minor road maintenance consisting of grading the road surface.
  - 1) How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?  
No impact.
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.  
No.
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.  
None.
- g. Proposed measures to reduce or control transportation impacts, if any:  
Road maintenance will divert storm water onto stable forest floor. To protect soil productivity and reduce erosion, ground based operations will be suspended during periods of wet weather or wet soil conditions when rutting of skid or shovel roads begins.

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.  
No.
- b. Proposed measures to reduce or control direct impacts on public services, if any.  
None.

16. Utilities

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.
- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.  
Does not apply.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by: Drew Rosanbalm Forester 2 Date: 6/6/03  
Title